



## Grassy Mountain Coal Project Environmental Impact Assessment Project Summary Table

Benga Mining Limited  
12331 – 20 Avenue  
PO Box 660  
Blairmore, Alberta, T0K 0E0  
Phone: +1 403 753 5160  
Business: 84170 9538



### **Riversdale Resources Limited**

Address: PO Box 660  
12331- 20<sup>th</sup> Avenue, Blairmore, Alberta  
T0K 0E0

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File #14-00201-01

Benga Mining Limited operating as Riversdale Resources

## PURPOSE OF THE SUMMARY TABLE

The purpose of this document is for Benga Mining Limited (Benga), a wholly owned subsidiary of Riversdale Resources Limited (Riversdale) to provide a high level summary of the pertinent information required by government agencies for an Environmental Impact Assessment (EIA) report prepared under the *Environmental Protection and Enhancement Act (EPEA)* as it relates to the Grassy Mountain Coal Project (the Project). This information is summarized in Table 1, and the project footprint is provided in Figure 1.

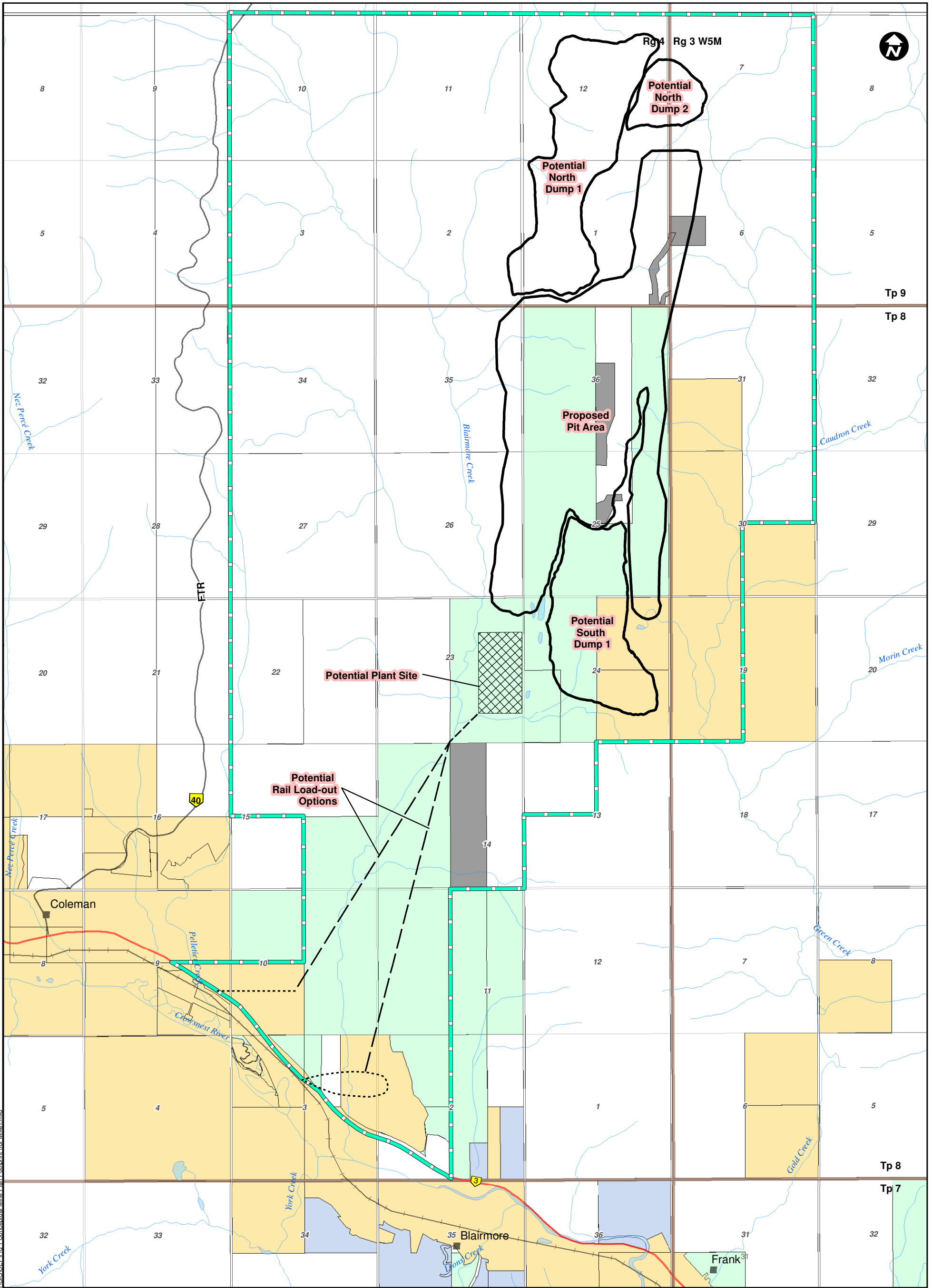
<b>Table 1 Grassy Mountain Coal Project - Project Summary Table</b>			
<b>Name of Company that will hold Approval:</b>	Benga Mining Limited Operating as Riversdale Resources Limited.	<b>Company Contact Name and Information:</b>	Steve Mallyon Po Box 660 12331 20 <sup>th</sup> Ave Blairmore AB T0K 0E0 Canada Bus: (403) 753 5160
<b>Company Website:</b>	www.rivresources.com		
<b>Type of Project (e.g., in-situ, mine, quarry, upgrader, etc.):</b>	Open Pit Coal Mine and Coal Processing Plant		
<b>Type of Activity (major project processes):</b>	Construction, operation, and reclamation of coal mine with processing facilities	<b>New Project, Expansion, or Modification:</b>	New Project, considerable mining development occurred in the past.
<b>Project Location (Legal Land Description) and Municipality:</b>	Sec. 6, 7; Twp. 9; Rge 3; W5M Sec. 1, 2, 3, 10, 11, 12; Twp. 9; Rge 4; W5M Sec. 2, 3, 9, 10, 11, 13, 14, 15, 22, 23, 24, 25, 26, 27, 34, 35, 36; Twp. 8; Rge 4; W5M Sec. 19, 30, 31; Twp. 8; Rge 3; W5M	<b>Life of Project (# years, YYYY-YYYY):</b>	20 years, 2018 to 2038
<b>Average Production Capacity per Year (specify units)</b>	Proposed Average Production of 2.0 to 4.0 million CMT per year	<b>Power Source (If on site power generation describe quantity (MW) and facilities):</b>	Power obtained under agreement from service provider, tie-in and connection to existing power grid.
<b>Nearest Residence (km):</b>	Town of Blairmore corporate limits border the project area to the south	<b>Private or Public Land:</b>	There is a combination of Crown Land and Private Land involved with the Project.
<b>Nearest First Nation Reserve(s) (name and km):</b>	Piikani Nation – ~60 km Blood Tribe – ~ 100 km Siksika Nation – ~ 180 km Tsuu T'ina Nation – ~ 140 km Stoney Nation – ~ 170 km Ktunaxa Nation – ~ 20 km	<b>Total Project Area (ha):</b>	6,121 ha is the size of the proposed Mine Permit boundary.
<b>Total Area to be Disturbed (ha):</b>	exact area is unknown (approx. 2,800 ha)	<b>Infrastructure Requirements (roads, pipelines, water intake, storage tankage):</b>	Pit areas, waste rock disposal areas, coal processing plant, access road and conveyor, rail loadout and rail siding, raw and clean coal stockpiles, coal haul roads, groundwater supply wells, septic treatment, reclamation material stockpiles and potential watercourse diversions

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<b>Method of Product Transport (e.g., pipeline, rail, truck):</b>	Raw coal will be transported by conveyor into plant and coal wash facility; clean coal will be transported from stockpiles by conveyor to load out facility; coal trains will be loaded from the load out facility for transport to shipping terminals on the west coast of BC.	<b>Project Products:</b>	Metallurgical/coking coal
<b>Location of End Market:</b>	Asian Markets including Japan, Korea and China	<b>Project By-Products:</b>	Non marketable coal, coal cleaning waste and waste rock
<b>Expected Types of Air Emissions (e.g., SO<sub>2</sub>, NO<sub>x</sub>, CO<sub>2</sub>):</b>	Primarily particulates from road dust and conveyor transport, minor emissions from diesel powered motors (internal combustion engines), coal cleaning plant and other emission sources	<b>Expected Types of Effluent Releases (note the water bodies the effluent will be released to):</b>	All surface runoff onsite is collected and treated in a settling pond system, before release to area watershed. All discharges subject to criteria specified in the EPEA approval. Selenium may be present in the waste rock, tests are currently being undertaken.
<b>Types of Wastes Generated:</b>	Typical wastes of mobile equipment will be generated (i.e., motor oil, filters, antifreeze, grease, batteries, etc.)	<b>Waste Management Facilities (i.e., Disposal Well, Salt Caverns, Landfill, or Third-Party):</b>	Wastes will be recycled or disposed of at the appropriate and approved waste management facility.
<b>Nearest Waterway/ Waterbody (name and km):</b>	Blairmore Creek (immediately adjacent to the west of Grassy Mountain) and Gold Creek (immediately adjacent to the east of Grassy Mountain).	<b>Watercourse Crossings (type of crossing, any Class A to C waterbodies):</b>	To be determined.
<b>Water Act Licence Required (Y/N/Unknown/NA. If yes: purpose, source and estimated volumes):</b>	Yes, groundwater (possibly supplemented by approved surface water sources). Water volumes to be determined.	<b>Water Act Approval Required (Y/N/Unknown. If yes, purpose):</b>	Yes, Water Act approval to allow for water management and reclamation.
<b>Fisheries Act Authorization Required (Y/N/Unknown):</b>	Unknown	<b>Navigable Waters Protection Act Authorization Required (Y/N/Unknown):</b>	No
<b>Waterbodies Required (Y/N/Unknown/NA. If yes, # and ha):</b>	Yes, end pit lakes and wetlands will form part of the reclaimed landscape. The number and size are not known at this time.	<b>Nearest Water Well (km) (Domestic and Commercial):</b>	Nearest domestic water well will be 10 km from the nearest development. There are no known commercial wells within 5 km of the project.

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<b>Nearest Provincial Highway (# and distance):</b>	Highway 3 – proposed mine plant and pit areas within 10 km	<b>Access to Provincial Highway (no improv req/improv req/const req):</b>	Project will use currently approved crossings of provincial highways. Conveyor crossing for train load out facility may be required over or under Hwy. 3.
<b>Traffic Impact Assessment Required (Yes/No/Unknown):</b>	Yes	<b>Pre-disturbance Land Use(s):</b>	Multiple uses currently occurring on the area including timber harvesting, oil and gas, trapping, hunting, fishing and recreation and traditional use.
<b>Projected Construction Start (Month/Year)</b>	2017	<b>Projected Operation Start (Month/Year)</b>	2018
<b>Reclamation Start and End (YYYY - YYYY):</b>	2018 to end of project	<b>Post-reclamation Land Use(s):</b>	Commercial forestry, wildlife habitat, and recreation
<b>Any Unique Environmental or Social Considerations (if yes, describe):</b>	Mining is planned within 10 km north and northeast of Blairmore and Coleman corporate limits, respectively Private land holdings along eastern boundary of the Project (that are not owned by Riversdale)	<b>Historic Resources Impact Assessment Required (Y/N/Unknown):</b>	Yes
<b>Estimated Construction Person-Years of Employment:</b>	700	<b>Estimated Operation Persons-Years of Employment:</b>	400 people x 20 years = 8000 years
<b>Construction or Operation Camp Required (Y/N/Unknown. If yes, on-site or off-site):</b>	It is likely that a construction camp may be required.	<b>Method of Transport of Employees to Site (Construction and Operation):</b>	Construction phase – combination of busses/vans and personal vehicles. Operations phase – to be determined.
<b>Date Stakeholder Engagement Started (Public/Aboriginal):</b>	Both the public engagement and Aboriginal consultation commenced in June 2013 when the Grassy Mountain Project was announced	<b>Aboriginal Groups Involved in Stakeholder Engagement:</b>	Piikani Nation Blood Tribe Siksika Nation Tsuu T'ina Nation Stoney Nation Ktunaxa Nation Alberta Metis Nation

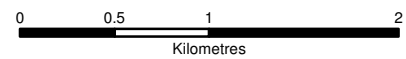


**Legend**

- Primary Highway
- Secondary Highway
- Railway
- Proposed Mine Permit Boundary

**Land Ownership**

- Crown
- Crown (Leased by Riversdale)
- Private (Riversdale)
- Private (Other)
- Municipal



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REF: Mine Plan by Golder, 2014.

PROJECT: <b>Grassy Mountain Coal Project</b>		<b>MILLENNIUM</b> EMS Solutions Ltd.	
TITLE: <b>Potential Mine Plan Footprint</b>		DRAWN: JDC	FIGURE: <b>1</b>
		CHECKED: MB	
		DATE: Sep 26/14	
		PROJECT: 14-00201	